

Town of Millbury



2020 Yearly Operational Plan

Submitted by:
Town of Millbury
Department of Public Works

Prepared by:
 Vegetation Control Service, Inc.

May 1, 2020

SUMMARY

A yearly operational plan (YOP) must be submitted to the Massachusetts Department of Agricultural Resources (MDAR) every year herbicides are intended for use to maintain public ways (rights-of-way). The YOP provides a detailed program for vegetation management including the methods used to identify target vegetation and sensitive areas, planned treatment methods, herbicides and herbicides mixtures and rates for the year.

A five-year Vegetation Management Plan (VMP) is available for review at the Millbury Department of Public Works (DPW) office.

Upon receipt of this YOP, the MDAR publishes a notice in the Environmental Monitor. The town must also provide a copy of the proposed YOP and Environmental Monitor notice to the Board of Health, Conservation Commission, and Chief Elected Official. The Department allows a 45-day comment period on the proposed YOP beginning with the publication of the notice and receipt of the YOP and Environmental Monitor notice. A one-page notice is also sent to all public water suppliers.

Public notification of herbicide application is made at least 21 days prior to the treatment(s) by a separate notice. This Notice is made to the Department of Agricultural Resources, Chief Elected Official, Board of Health, the Conservation Commission and the Municipal Public Water Supplier (DPW).

A newspaper notice will also be made at least 48 hours in advance of the start of the treatment program.

Any comments on this YOP should be made to the person designated herein as the person supervising the YOP:

Keith Caruso,
DPW Supervisor
Town of Millbury
Department of Public Works
127 Elm Street
Millbury, MA 01527

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1. INTRODUCTION

In compliance with Commonwealth of Massachusetts' Rights-of-Way Vegetation Management Regulations (333 CMR 11.00) the Town of Millbury Department of Public Works Yearly Operational Plan (YOP) details our vegetation management program for 2020. This YOP is consistent with the terms and procedures set forth in Millbury's *2018-2022 Five-year Vegetation Management Plan* (VMP); with the Massachusetts Pesticide Control Act (Chapter 132B); with all pertinent clauses in Chapter 85 of the Acts of 2000; and with all acts and regulations that apply to "public way" (right-of-way) vegetation management.

Vegetation growing along curbing, within and around paved traffic islands, in cracks in the asphalt, under guiderails along roadways and in areas that cannot be mowed is of a growing concern in Millbury. These areas, along with Poison Ivy, Japanese Knotweed and other public nuisance vegetation within the public ways, can be effectively controlled with the use of herbicide applications.

Herbicide applications will be done under the supervision of a certified applicator in compliance with 333 CMR 11.00 as detailed in the public way Integrated Vegetation Management (IVM) program and protocols described in Millbury's VMP.

An Integrated Vegetation Management program on public ways is a combination of cultural, physical, mechanical, and chemical management techniques that control undesirable vegetation in an ecologically sound manner. As with all IVM programs, this program is designed to maximize control of incompatible vegetation while minimizing potential impact to the environment.

2. INDIVIDUALS PERFORMING AND SUPERVISING THE HERBICIDE TREATMENT

The Town of Millbury DPW will supervise the herbicide applications. Application crews will be supervised by/consist of an individual with a MDAR issued Category 40 pesticide license and any additional crew members will, at a minimum, hold MDAR issued applicator pesticide licenses.

Supervisor:

Keith Caruso
DPW Supervisor
Town of Millbury
Department of Public Works
127 Elm Street
Millbury, MA 01527

Herbicide Applicators:

Vegetation Control Service
2342 Main Street
Athol, MA 01331

3. LOCATION OF INTENDED HERBICIDE TREATMENT(S)

For 2020, the treatment areas include, but are not limited to, cracks in asphalt, along guiderails, along curbing, within and around paved traffic islands, between sidewalks and the adjacent curbing, and wherever vegetation is causing a public hazard in the town's public ways (rights-of-way) as defined in the VMP.

Known sensitive areas are included in the map(s) of Millbury included in Appendix 1. Appendix 1 also includes a street listing to cover potential treatment locations for public nuisance and other vegetation posing a risk to public safety. Predicting the location of all target vegetation along public ways in advance of the active growing season is not possible or practical. In an effort to limit the application of herbicides to areas that require treatment, the town will, therefore, conduct patrols and treat those areas in which vegetation poses a public nuisance and/or poses a safety risk to pedestrian or vehicular safety.

4. IDENTIFICATION OF TARGET VEGETATION

Target Vegetation:

Vegetation that poses a public nuisance and/or poses a risk to pedestrian or vehicle safety.

Achieving a long-term, low maintenance vegetation management program requires the ability to identify incompatible plant species and to understand why they are targets. Incompatible vegetation along public ways poses a public nuisance and/or a safety risk to pedestrian or vehicles and interferes with the safe movement of goods and services.

Vegetation Posing a Risk to Safety

Vegetation that obstructs visibility or impedes movement along public ways poses a risk to public safety. M.G.L. Chapter 87, Section 5 authorizes tree wardens to control “all public shade trees, shrubs, and growths” along public ways. This includes woody plant species, grass and herbaceous species and public nuisance vegetation as listed below. For example, any vegetation such as grape vines or tree branches that might obscure street signs.

Public Nuisance and Noxious Vegetation

Public nuisance vegetation includes, but is not limited to plant species growing along public ways that pose a health, safety or environmental hazard. Noxious vegetation (weeds)¹, which includes poisonous and invasive plants, pose a risk to safety and health because of heavy thorns, dense foliage and/or impenetrable stems; examples include, but are not limited to, Multi-flora Rose, Common and Glossy Buckthorn, Japanese Knotweed, Blackberries, Barberry and Autumn Olive. Although not the only poisonous target species of concern, Poison Ivy comprises the overwhelming majority of poisonous plant communities along public ways that require control.

Nuisance Grass and Herbaceous Growth

In most instances, grass is a desirable plant species. Along the shoulders of roads, grass growth is often encouraged and maintained through mechanical mowing. However, in some instances, grasses and other herbaceous plants are targets in areas where they cause a safety risk. These areas include, but are not limited to, cracks in asphalt, along guiderails, within paved traffic islands, medians, on and between sidewalks and the adjacent curbing. Herbaceous and other broadleaf vegetation can also impair the stability of grassy areas by out-competing the desirable grass species.

5. DEFINITION, IDENTIFICATION AND TREATMENT OF SENSITIVE AREAS

The general definition of sensitive areas regulated by 333 CMR 11.04 is as follows:

...any areas within Rights-of-Way, including No-Spray and Limited-Spray Areas, in which public health, environmental or agricultural concerns warrant special protection to further minimize risks of unreasonable adverse effects.

Protecting these sensitive sites is accomplished by following the definition in 333 CMR 11.04 and establishing the mandated no-spray and treatment restrictions within their borders according to Table 1 below. In brief, these sensitive areas consist of no-spray zones in which herbicide use is prohibited, and limited spray areas where herbicide use is permitted under certain conditions.

¹ “NOXIOUS WEED. - The term “noxious weed” means any plant or plant product that can directly or indirectly injure or cause damage to crops (including nursery stock or plant products), livestock, poultry, or other interests of agriculture, irrigation, navigation, the natural resources of the United States, the public health, or the environment.” (PUBLIC LAW 106-224—JUNE 20, 2000, TITLE IV—PLANT PROTECTION ACT).

Treatment in limited spray areas require the use of herbicides from the *Sensitive Area Materials List* available at: <http://www.mass.gov/eea/agencies/agr/pesticides/rights-of-way-vegetation-management.html> and following the application restrictions in 333 CMR 11.04 which includes applying minimum herbicide application rate for the control of target species.

TABLE 1: CONTROL STRATEGIES FOR SENSITIVE AREAS

Table Compiled by Jeffrey M. Taylor, Vegetation Control Service, Inc.

Sensitive Area	Limited Spray or No-Spray Areas (feet)	Control Method	Time Limits Between Treatment(s)
Public Ground Water Supplies	400'	Mechanical Only	None
Primary Recharge Area	Designated buffer zone or ½-mile radius	Mechanical, Approved Herbicides*	24 months
Public Surface Water Supplies (Class A & Class B)	100'	Mechanical Only	None
	100'-400'	Approved Herbicides	24 months
Tributary to Class A Water Source, within 400' upstream of water source	100'	Mechanical Only	None
	100'-400'	Approved Herbicides	24 months
Tributary to Class A Water Source, greater than 400' upstream of water source	10'	Mechanical Only	None
	10'-200'	Approved Herbicides	24 months
Class B Drinking Water Intake, within 400' upstream of intake	100'	Mechanical Only	None
	100'-200'	Approved Herbicides	24 months
Private Drinking Water Supplies	50'	Mechanical Only	None
	50'-100'	Approved Herbicides	24 months
Surface Waters	10'	Mechanical Only	None
	10'-100'	Approved Herbicides	12 months
Rivers	10' from mean annual high water line	Mechanical Only	None
	10'-200'	Approved Herbicides	12 months
Wetlands	10'	Mechanical Only	None
	100' or with approved Wetlands Determination 10'-100' [per 310 CMR 10.05(3)(a) & 310 CMR 10.03(6)(b)]	Low-pressure Foliar, CST, Basal, Approved Herbicides	24 months
Inhabited Areas	100'	Approved Herbicides	12 months
Agricultural Area (Crops, Fruits, Pastures)	100'	Approved Herbicides	12 months
Certified Vernal Pools	10'	Mechanical Only when water is present	None
Certified Vernal Pool Habitat	10'-outer boundary of habitat	No treatment without approval	
Priority Habitat	No treatment outside the 4-foot paved road exemption without approval of the Natural Heritage Endangered Species Program (NHESP)		

*Massachusetts Approved herbicides for sensitive sites

Identification Methods

As appropriate, sensitive areas will be identified and marked in the field by trained and experienced individuals.

Two simple descriptions guide the identification of the sensitive areas defined in 333 CMR 11.04: *Readily identifiable in the field* and *Not readily identifiable in the field*. *Readily identifiable in the field* areas will be treated, identified and when appropriate, marked according to all applicable restrictions listed in 333 CMR 11.00. *Not readily identifiable in the field* areas will likewise be marked and treated when appropriate, but they are identified by the use of data marked on maps and collected in the YOP and notification processes before the time of treatment.

The individuals assigned the task of identifying and treating sensitive areas in the field will use the appropriate sources and methods from the following list:

- Town maps, records and institutional knowledge
- Massachusetts Department of Environmental Protection water supply maps mapping layers available through MassGIS (<https://www.mass.gov/orgs/massgis-bureau-of-geographic-information>)
- Water Department, MDAR and Millbury Board of Health maps and lists of identified private wells along the ROW
- Correspondence, meetings and input—from the chief elected official, board of health, conservation commission, public water suppliers and the public—within the forty-five day YOP and twenty-one day municipal right-of-way notification letter review and comment periods and the 48 hour newspaper notification (under 333 CMR 11.06 & 11.07 and Chapter 85 of the Acts of 2000)
- A point person who verifies, identifies and where appropriate marks sensitive areas
- and any additional areas that may require special precautions
- USGS topographical maps
- Information from Mass GIS
- When necessary, confidential information from NHESP
- A copy of the YOP and VMP.

Sensitive areas will be identified and marked in the field by trained and experienced individuals.

6. PROPOSED HERBICIDE TREATMENT METHODS

In 2020 the herbicide program will consist of the following:

Chemical (Herbicide Applications) Methods

1. **Foliar Treatments:** the selective application of herbicides diluted in water, to the foliage of target vegetation. Two types of equipment for foliar treatments are used: back pack and vehicle mounted; both use low pressure at the nozzle per 333 CMR 11.02. Foliar

applications take place when leaves are fully developed in the spring until early fall and the beginning of leaf abscission—i.e., when leaves begin dropping.

- a. **Hand-held and back-pack sprayers:** hand pump or motorized back pack sprayers or squirt bottles. This technique is excellent for spot treatments, such as localized poison ivy infestations. It is not as effective as other methods on high density target vegetation.
 - b. **Vehicle mounted sprayers** use truck, tractor and/or ATV mounted equipment that delivers the herbicide solution through nozzles attached to a hose or boom-mounted apparatus. This technique is used along roadways that have good access and where obstructions, terrain or site sensitivity do not exclude the equipment.
2. **Pre-emergent Treatments:** the use of pre-emergent herbicides using the same equipment described in the foliar treatments above. Pre-emergent applications are used where season long vegetation control requires “vegetation-free conditions” such as along curbing, sidewalks, under guiderails/guardrails and on paved traffic islands. This method is used from the early spring to early fall.
3. **Cut Stump Treatment (CST):** the mechanical cutting of target species followed by an herbicide treatment to the phloem and cambium tissue of the stumps. CST treatments prevent re-sprouts, thereby reducing the need to re-treat the same vegetation. The CST mixture is diluted in water, basal oil or a non-freezing agent and is ideally made to freshly cut stumps. Application equipment includes low-volume, backpack sprayers, hand held squirt bottles, paintbrushes, or sponge applicators. This method is used where maximum control is desirable; to reduce the visual impact of vegetation management treatments, and/or to reduce the potential of adverse impacts to desirable vegetation because of its selectivity. CST may be used at any time of the year provided snow depths do not prevent cutting the stumps below three inches in height. It is best to avoid during the season of high sap flow, or in moderate to heavy rains. It is not practical in moderate to heavy stem densities.
4. **Low Volume Basal Treatment:** the selective application of an herbicide, diluted in specially formulated oil, to wet the entire lower twelve to eighteen inches of the target plant stems. Using a hand pump backpack, the oil enables the herbicide solution to penetrate the bark tissue and translocate within the plant. Low volume basal treatments are extremely selective and used when vegetation density is low and in areas where extreme selectivity is necessary. For public way treatments it is primarily an option for invasive species control. It can be used any time of year except when snow is too deep, in extremely wet weather and/or during spring sap flow.

Final Note: Anti-drift Adjuvants are added to the mix or solution in foliage and pre-emergent applications to help reduce the potential exposure to non-target organisms, reduce the break-up of sprays into fine droplets and increase selectivity and herbicide deposition onto target plants.

7. PROPOSED HERBICIDES, CARRIERS, ADJUVANTS AND RATES

Millbury will only use the Commonwealth of Massachusetts recommended herbicides listed below from the *Sensitive Area Materials List*. Complete information on these products is included in Appendix 2, Fact Sheets and Appendix 3, Labels

Table 2: Tank Mix #1 for Curbing, Cracks, Guiderail, Traffic Island Treatments (General Foliar Weed Control)

Herbicides & Adjuvants	Active Ingredient	EPA Registration Number(s)	Mix Concentration (per 100 gals. water)
Rodeo	Glyphosate	62719-324	2-5%
Esplanade 200SC*	Indaziflam	432-1516	10 oz.
Induce, Clean Cut, or equivalent surfactant ²	not applicable	n.a.	0.125%-1%
Point Blank, 41A, Clasp, or equivalent drift retardant ¹	n.a.	n.a.	4-16 oz.
Carrier: Water	n.a.	n.a.	n.a.

* Esplanade 200SC will only be used if the product is added to the Massachusetts Sensitive Materials list prior to the 2020 treatment.

Table 3: Tank Mix #2 for Poison Ivy, Noxious and Invasive Species and Post Emergent General Weed Control

Herbicides & Adjuvants	Active Ingredient	EPA Registration Number(s)	Mix Concentration (per 100 gals. water)
Rodeo	Glyphosate	62719-324	2-5%
Escort XP	Metsulfuron-Methyl	432-1549	1.25-4 oz.
Garlon 4 Ultra (optional)	Triclopyr	62719-527	0.25-0.5%
Induce PH, MSO, or equivalent surfactant ¹	not applicable	n.a.	0.125%-1%
Reign, 41A, Clasp or equivalent drift retardant ¹	n.a.	n.a.	4-16 oz.
Carrier: Water	n.a.	n.a.	n.a.

Table 4: Tank Mix #3 for Poison Ivy

Herbicides & Adjuvants	Active Ingredient	EPA Registration Number(s)	Mix Concentration (per 100 gals. water)
Garlon 4 Ultra	Triclopyr	62719-527	2-4%
Induce PH, MSO, or equivalent surfactant ¹	n.a.	n.a.	0.125%-1%
Reign, Clasp, or equivalent drift retardant ¹	n.a.	n.a.	4-16 oz.

² Equivalent surfactants, drift retardants and basal oils will be used in case those listed are no longer available or more effective alternatives become available.

Table 5. Tank Mixes #4 for Low Volume Foliage Applications

Herbicides & Adjuvants	Active Ingredient	EPA Registration Number(s)	Mix Concentration (per 100 gals. water)
Rodeo	Glyphosate	62719-324	3-5%
Escort XP	Metsulfuron-Methyl	432-1549	2-4 oz.
Krenite S	Fosamine Ammonium	42750-247	6-10%
Polaris	Imazapyr ³	228-534	0.125%-.5%
Induce PH, MSO, or equivalent surfactant ¹	n.a.	n.a.	0.125%-1%
Reign, Clasp, or equivalent drift retardant ¹	n.a.	n.a.	6-64 oz.

Table 6. Tank Mix #5 for Cut Surface Treatment (CST) Applications

Herbicides & Adjuvants	Active Ingredient	EPA Registration Number(s)	Mix Concentration (per 100 gals.)
Rodeo	Glyphosate	62719-324	40% to 50%
Polaris	Imazapyr ²	228-534	3%-5% (mixed with Rodeo)
Carriers: Water or Windshield Washer Fluid	n.a.	n.a.	n.a.

Table 7. Tank Mix #6 for Low-Volume Basal Applications or Cut Surface Treatment (CST) Applications

Herbicides & Adjuvants	Active Ingredient	EPA Registration Number(s)	Mix Concentration
Garlon 4 Ultra	Triclopyr	62719-527	20%-30%
Polaris	Imazapyr ²	228-534	2-5% (Mixed with Garlon 4 Ultra)
Carrier: Aqua Mix Oil or equivalent	n.a.	n.a.	70%-80%

8. HANDLING, MIXING AND LOADING HERBICIDE CONCENTRATES

All herbicides will be handled, mixed and applied according to the directions in 333 CMR 11.00, which includes following *Label Instructions* and in compliance with all applicable federal and state laws and regulations. All herbicide mixing should be done at the DPW garage or contractor's facilities and extreme care shall be exercised during all mixing, handling and loading in order to prevent careless spills or splashes. No herbicide concentrates will be mixed, handled or loaded on a ROW or within one hundred feet of a sensitive area.

Although it is expected that all the mixed herbicide will be used, any remaining will be stored in accordance with manufacturer's instructions.

³Imazapyr will not be applied on the same location in two consecutive years.

9. ALTERNATE CONTROL TECHNIQUES

Decisions on the appropriate control techniques are made following the IVM Protocol in the VMP which for convenience is repeated below:

Monitoring: All public ways will be surveyed prior to any scheduled treatment program. Monitoring will be conducted by foot or by vehicle. Monitoring of areas may also result from public requests.

Maintenance: Roads will be cleaned using a street sweeper. Cracking asphalt and sidewalks and other right-of-way defects will be repaired and ditches cleaned. Where appropriate, the use of ground cover will be encouraged to assist in the prevention of undesirable target vegetation growth.

Direct Control Methods: The decision to use one or a combination of IVM techniques will take into consideration the cultural uses of the landscape. The direct IVM management tactics selected will control nuisance vegetation in an environmentally responsible and efficient manner:

A. Mechanical Controls

1. Hand Cutting
2. Mowing
3. Selective Pruning

B. Chemical Controls

1. Foliar Treatments
2. Pre-emergent Treatments
3. Cut Stump Treatments
4. Basal Treatments

Record Keeping: A log of surveyed areas will be kept for future planning and reference purposes. Areas maintained either through physical repair, mechanical or chemical control will be recorded by DPW for at least 3 years.

10. TREATMENT RECORDS

The Category 40 applicator must complete daily vegetation management reports that include:

- A. Date, name and address of certified applicator(s)
- B. Identification of site or work area
- C. List of crew members
- D. Type of equipment and hours used
- E. Method of application and description of target vegetation
- F. Amount, concentration, product name of herbicide(s), adjuvants, and diluents (EPA registration numbers must be on file)
- G. Weather conditions
- H. Notation of any unusual conditions or incidents, including public inquiries
- I. Recording/Verification of sensitive areas.

11. REMEDIAL PLAN TO ADDRESS SPILLS AND RELATED ACCIDENTS

This section is offered as a general procedural guide for responding to chemical spills or related accidents (related accidents include but are not limited to fire, poisoning and vehicle accidents). The following is, therefore, a guide to the items that will be available to the applicator on site in the event of a chemical spill or emergency.

Although education and attention will constantly be directed at accident and spill prevention, in the event of a spill, immediate action will be taken to contain the spill and protect the spill area (Appendix 4: *Herbicide Spill Check List* shall be available on-site to the applicator). Until completely clean, the spill area will be protected by placing barriers, flagging or crew members at strategic locations, as appropriate. If a fire is involved, care will be taken to avoid breathing fumes from any burning chemicals.

Minor spills will be remedied by soaking up the spill with adsorption clay or other adsorptive material and placed in leak proof containers, removed from the site and disposed of properly. Dry herbicides, such as granular, will be swept up or shoveled up directly into leak proof containers for proper disposal. When applicable, all contaminated soil will be placed in leak proof containers, removed from the site and disposed of properly. When applicable, activated charcoal will be incorporated into the soil at the spill location at a rate of several pounds per thousand square feet to inactivate any herbicide residue. Any spill will be reported to the MDAR Pesticide Division.

The Massachusetts Department of Environmental Protection will be contacted when there is a spill of a reportable quantity, regardless of major or minor spill status and in accordance with 310 CMR 40.0000, Massachusetts Contingency Plan.

Types of Chemical Spills that Require Action

Chemicals include, but are not limited to the following:

- Herbicides
- Bar and Chain Oil
- Motor and Hydraulic Oil/Fluids
- Diesel Fuel
- Gasoline
- Title 3 Hazmat Materials

Required Spill Response Equipment

As a minimum, the treatment crew will have available on the job site:

- YOP with Emergency Contact List
- SDS (Safety Data Sheet)
- Product Label
- Product Fact Sheets (when applicable)
- Appropriate Adsorbent Material
- Shovel
- Broom
- Flagging
- Leak Proof Container
- Heavy-duty Plastic Bags

Personal Contact

In the event of **Personal Contact** with hazardous chemicals:

- Wash affected area with plenty of soap and water
- Change clothing which has absorbed hazardous chemicals
- If necessary, contact a physician
- If necessary, contact the proper emergency services
- If necessary, follow the procedures for Major or Minor Spills as outlined in Appendix 5
- Avoid breathing the fumes of hazardous chemicals

Reference Tables (information subject to change as necessary)

Table 8. Herbicide Manufacturers

MANUFACTURER	TELEPHONE NUMBER	SPECIAL INSTRUCTIONS
Albaugh Inc.	(800) 247-8013	
BASF Corporation	(800) 832-4357	
Bayer Environmental Science	(800) 334-7577	
Corteva Agriscience	(800) 992-5994	
Nufarm	(877) 325-1840	Medical Emergencies

Table 9. State Agencies

STATE AGENCY	TELEPHONE NUMBER	SPECIAL INSTRUCTIONS
Massachusetts Pesticide Bureau	(617) 626-1784	A.S.A.P. (within 48 hours)
Massachusetts Department of Environmental Protection, Emergency Response Section	Main Office: (888) 304-1133 (after hours number)	For emergencies involving reportable quantities of hazardous materials; required info: City/town, street address, site name (if applicable), material
MA Department of Public Health, Bureau of Environmental Health's Environmental Toxicology Program	(617) 339-8351	
Massachusetts Poison Information Centers	(800) 682-9211	For medical emergencies involving suspected or known pesticide poisoning symptoms

Table 10. Emergency Services

EMERGENCY SERVICE	TELEPHONE NUMBER	SPECIAL INSTRUCTIONS
Millbury Fire/ Police Department	911	
Massachusetts State Police, Millbury Barracks	(508) 929-3232	
ChemTrec	(800) 262-8200	
Clean Harbors	(800) 645-8265	
Pesticide Hotline	(800) 858-7378	PST: 8:00 am-12:00 pm, web: www.NPIC.orst.edu

Table 11. Town of Millbury contacts in case of a spill or accident:

Keith Caruso
DPW Supervisor
 Town of Millbury
 Department of Public Works
 127 Elm Street
 Millbury, MA 01527
 (508) 865-9143

Millbury Fire/ Police Dept.	911
Millbury Board of Health	(508) 865-4721

APPENDIX 1:
MAP AND STREET LISTINGS

Town of Millbury 2020 Yearly Operational Plan

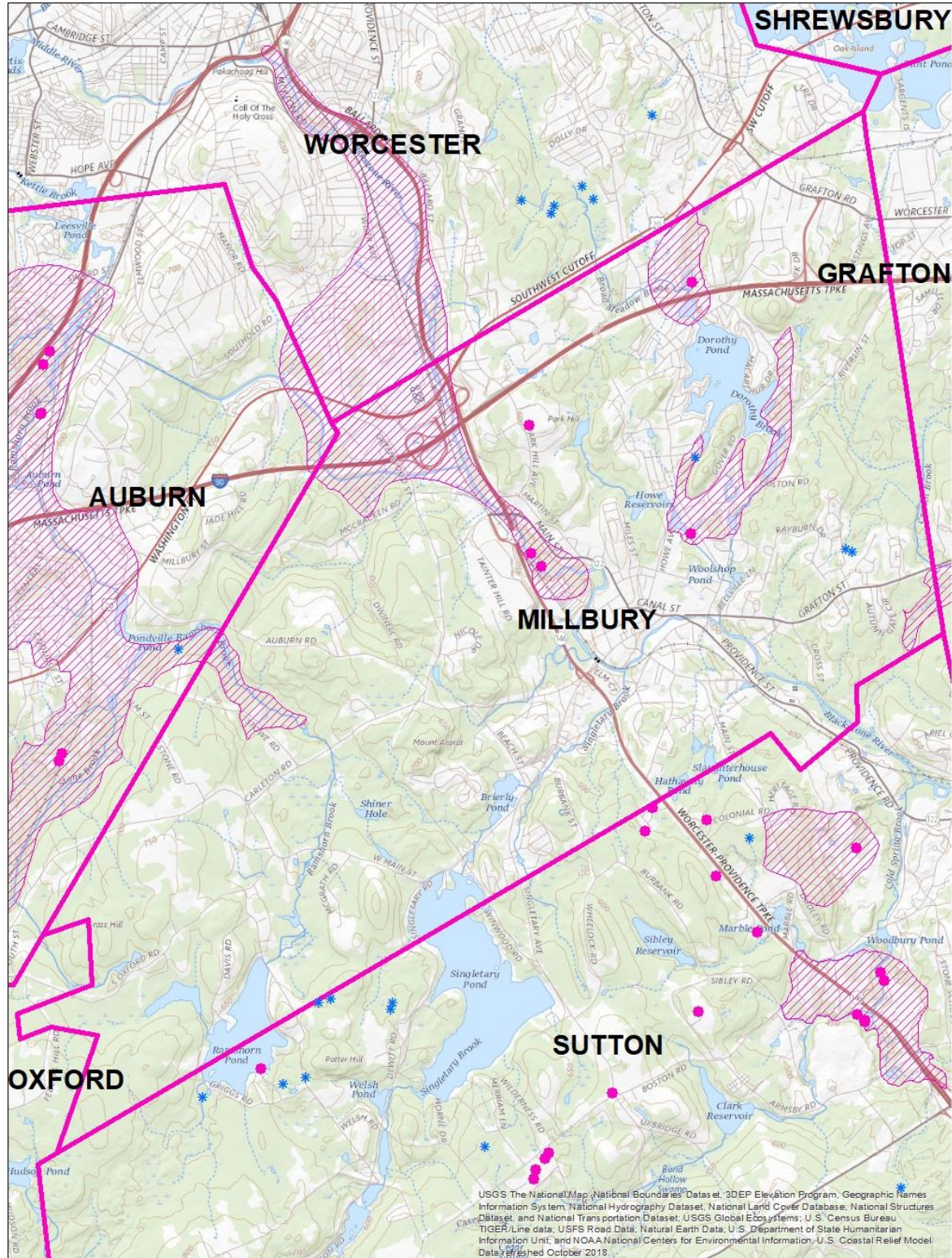


0 0.5 1 2 Miles

Legend

- Public Wells
- ★ NHESP Certified Vernal Pools
- Zone II
- Zone A

(Source: Office of Geographic and Environmental Information (Mass GIS), Commonwealth of Massachusetts, Executive Office of Energy and Environmental Affairs)
Public Water Supply data provided by MA DEP Drinking Water Program, October 2019, DEP Public Water Supplies
Aerial Imagery: orthorectified (year: 2013, UTM 18QDA)



Source: "Office of Geographic and Environmental Information (Mass GIS), Commonwealth of Massachusetts, Executive Office of Energy and Environmental Affairs";
Public Water Supply data provided by MA DEP Drinking Water Program, October 2019, DEP Public Water Supplies

April 23, 2020

<u>STREET NAME</u>	<u>STREET NAME</u>	<u>STREET NAME</u>
ABBOTT PLACE	CANAL STREET	ELM COURT
ACKERMAN ROAD	CAPT. PETER SIMPSON RD.	ELM STREET
ACWORTH STREET	CARLETON ROAD	ELMWOOD AVE
AIRPORT ROAD	CARLSTROM LANE	ELMWOOD STREET
ALDRICH STREET	CAROUSEL DRIVE	ELMWOOD TERRACE
ALPINE STREET	CEDAR AVENUE	EPPING STREET
ALSTEAD PATH	CHERRY STREET	FARNSWORTH COURT
AMARYLLIS DRIVE	CHERYL LANE	FEDERAL HILL ROAD
APPLE TREE DRIVE	CHESTNUT STREET	FINK ROAD
ASHTON LANE	CHUNIS AVENUE	FJELLMAN ROAD
ATWOOD AVENUE	CHURCH STREET	FONTAINE STREET
AUBURN ROAD	COLDBROOK ROAD	FORD ROAD
AUGUSTA DRIVE	COLONIAL DRIVE	FORREST DRIVE
AUTUMN GATE CIRCLE	COLTON ROAD	GATES LANE
AZALEA CIRCLE	CONCORD ROAD	GILBERT WAY
BACKSTRAD ROAD	CORAL STREET	GLENN AVENUE
BARBARA STREET	CRAIG WAY	GLOVER ROAD
BAYBERRY LANE	CRISTO LANE	GOFF STREET
BEACH STREET	CRONIN BROOK WAY	GOULD STREET
BELLA ROSA DRIVE	CROSS STREET	GOVER ROAD
BELLVILLE LANE	CROYDEN STREET	GRAFTON ROAD
BENGTSON LANE	CURVE STREET	GRAFTON STREET
BENTON STREET	CUSHING TERRACE	GRANITE STREET
BILL GRAHAM LANE	CYNDY LANE	GREENWOOD STREET
BIRCH STREET	DANIELLE DRIVE	GROVE STREET
BIRCHWOOD DRIVE	DAVIS ROAD	HAMILTON STREET
BLANCHARD DRIVE	DEWEY AVENUE	HARRIS AVENUE
BORDER AVENUE	DIANA HILL DRIVE	HARRIS GROVE
BRANEY ROAD	DIANE AVENUE	HARRIS POINT
BRENDA DRIVE	DOLAN ROAD	HASTINGS AVENUE
BRIAN CIRCLE	DOROTHY LANDING	HAWTHORNE STREET
BRIERLY CIRCLE	DOROTHY LANE	HAYWARD GLEN DRIVE
BRIGHTSIDE AVENUE	DOROTHY ROAD	HAYWARD LANE
BROADMEADOW AVE	DRAPER ROAD	HEATHER AVENUE
BUD ROW AVENUE	DURHAM ROAD	HEMLOCK DRIVE
BUDREAU AVENUE	DWINELL ROAD	HENRY STREET
BURBANK STREET	ELIZABETH DRIVE	HERRICKS LANE
CANAL COURT	ELLENWOOD ROAD	HIDDEN MEADOW DR

<u>STREET NAME</u>	<u>STREET NAME</u>	<u>STREET NAME</u>
HIGH STREET	LISA DRIVE	OAKES STREET
HIGHLAND AVENUE	LJ FARON CIRCLE	OAKVIEW DRIVE
HIGHLAND STREET	LOUIS BALLARD LANE	OLD COMMON
HILLTOP DRIVE	LT WILLIAM S. HAYNES III MEM. DR.	ORCHARD STREET
HOLLYWOOD AVENUE	LUIKEY WAY	OVERLOOK AVENUE
HOLMAN ROAD	MACARTHUR DRIVE	PARK HILL AVENUE
HORNE WAY	MAIN STREET	PARK STREET
HORSESHOE LANE	MANOR ROAD	PEACH TREE DRIVE
HOWE AVENUE	MAPLE LANE	PEARL STREET
HOWE LANE	MAPLE STREET	PEGGY DRIVE
IRENE COURT	MAPLEWOOD ROAD	PHEASANT HILL DRIVE
JACKIE DRIVE	MARGARET AVENUE	PHILLIPS DRIVE
JACKSON LANE	MARION AVENUE	PINE & OAK DRIVE
JACLYN RAE DRIVE	MARTIN STREET	PINEHURST CIRCLE
JACQUES PARKWAY	MASON ROAD	PINELAND AVENUE
JESSICA J. DRIVE	MATSON LANE	PINERIDGE ROAD
JOHN F. KENNEDY DR.	MATTHEW CIRCLE	POND TERRACE
JOHN STREET	MAY STREET	PRESIDENT ROAD
JOHNSON STREET	MAYFAIR DRIVE	PRIMROSE LANE
JONATHAN AVENUE	MAYFAIR LANE	PROSPECT STREET
JUNIPER DRIVE	MCCRACKEN ROAD	PROVIDENCE STREET
KATHERINE STREET	MCGRATH ROAD	RAILROAD AVENUE
KEITH DAVID DRIVE	MEETINGHOUSE LANE	RAILROAD COURT
KENWAR DRIVE	MEMORIAL DRIVE	RAMSHORN ROAD
KNOLLWOOD CIRCLE	MIDDLETON STREET	RAYBURN DRIVE
LAKE STREET	MILDRED AVENUE	RAYMOND STREET
LAKEVIEW ROAD	MILES STREET	RHODES STREET
LAKEWOOD AVENUE	MILL STREET	RICE ROAD
LAURA LANE	MILLBURY AVENUE	RIDGEWOOD DRIVE
LAUREL DRIVE	MILLBURY TERRACE	RINDGE STREET
LEBLANC ROAD	MILLERS DRIVE	RIVER STREET
LEONE AVENUE	MITCHELL ROAD	RIVERLIN PARKWAY
LESLIE LANE	MOMIN DRIVE	RIVERLIN STREET
LEXINGTON ROAD	MONTGOMERY DRIVE	ROE LANE
LINCOLN AVENUE	NICOLE DRIVE	ROGERS STREET
LINCOLN AVENUE EXT	OAK POND AVENUE	ROLLIE SHEPARD DR
LINDA AVENUE	OAK STREET	SALO TERRACE
LINDY STREET	OAKES CIRCLE	SCHOOL STREET

<u>STREET NAME</u>	<u>STREET NAME</u>	<u>STREET NAME</u>
SCOTT STREET	TAFT CIRCLE	WEDGEWOOD LANE
SHIRLEY AVENUE	TAINTER HILL ROAD	WELDON DRIVE
SHORE TERRACE	THOMAS HILL ROAD	WEST MAIN STREET
SILVER FOX DRIVE	TIFFANY CIRCLE	WEST STREET
SINGLETARY ROAD	TODD LANE	WESTBORO STREET
SOUTH MAIN STREET	TORREY LANE	WESTVIEW AVENUE
SOUTH OXFORD ROAD	TURNING LEAF LANE	WHEELOCK AVENUE
SOUTHWEST CUTOFF	UPTON STREET	WILDWOOD ROAD
STONE ROAD	VICTORIA TERRACE	WILLIAM STREET
STOWE ROAD	VILLAGE GREEN	WILSON ROAD
SULLIVAN PLACE	WALES STREET	WINGFOOT LANE
SUMMER STREET	WALLING AVENUE	WITTER LANE
SUNSET DRIVE	WARD AVENUE	WOODLAND STREET
SUTTON ROAD	WARREN STREET	WOODRIDGE LANE
SUTTON STREET	WASHINGTON STREET	WOODROW ROAD
SYCAMORE CIRCLE	WATERS COURT	WORCESTER PROVIDENCE TPKE
SYCAMORE STREET	WATERS STREET	

APPENDIX 2:
HERBICIDE FACT SHEETS
LOCATED AT:

<http://www.mass.gov/eea/agencies/agr/pesticides/rights-of-way-vegetation-management.html>

APPENDIX 3:
HERBICIDE LABELS

ESCORT XP:

[HTTP://WWW.CDMS.NET/LDAT/LDCFM000.PDF](http://www.cdms.net/LDAT/LDCFM000.PDF)

ESPLANADE 200SC:

[HTTP://WWW.CDMS.NET/LDAT/LDAB1001.PDF](http://www.cdms.net/LDAT/LDAB1001.PDF)

GARLON 4 ULTRA:

[HTTP://WWW.CDMS.NET/LDAT/LD7IN006.PDF](http://www.cdms.net/LDAT/LD7IN006.PDF)

KRENITE S:

[HTTPS://S3-US-WEST-1.AMAZONAWS.COM/WWW.AGRIAN.COM/PDFS/KRENITE_S_LABEL11.PDF](https://s3-us-west-1.amazonaws.com/www.agrian.com/pdfs/KRENITE_S_LABEL11.PDF)

POLARIS:

[HTTP://WWW.CDMS.NET/LDAT/LD8KR000.PDF](http://www.cdms.net/LDAT/LD8KR000.PDF)

RODEO:

<http://www.cdms.net/LDat/ld4TN013.pdf>

APPENDIX 4:
HERBICIDE SPILL CHECK LIST

APPENDIX 4: HERBICIDE SPILL CHECK LIST

REPORTABLE SPILLS (Spills of reportable quantity of material): FOLLOW STEPS 1-11

NON-REPORTABLE SPILLS: FOLLOW STEPS 1-4, 7-11 as appropriate & contact the Millbury DPW representative.

Order	ACTION		Done (√)
1	Use any and all PPE as directed by product label or SDS		
2	Cordon-off spill area to unauthorized people and traffic to reduce the spread and exposure of the spill		
3	Identify source of spill and apply corrective action, if possible stop or limit any additional amounts of spilled product.		
4	Contain spill and confine the spread by damming or diking with soil, clay or other absorbent materials.		
5	Report spills of "reportable quantity" to the Mass. DEP and MDAR:		
	Massachusetts MDAR, Pesticide Bureau	(617) 626-1700	
	Massachusetts Department of Environmental Protection, Emergency Response Section	Main Office: (888) 304-1133 (after hours number)	
		Central Region: (508) 792-7650	
6	If the spill cannot be contained or cleaned-up properly, or if there is a threat of contamination to any bodies of water, immediately contact any of the following applicable emergency response personnel:		
	local fire, police, rescue	911	
	Millbury DPW Representative: Keith Caruso	(508) 865-9143	
	Product manufacturer(s) 1 2 3	1	
	Product manufacturer(s) 1 2 3 Chemtrec	2	
		3	
		(800) 424-9300	
	additional emergency personnel:		
	Remain at the scene to provide information and assistance to responding emergency clean-up crews		
7	Refer to the various sources of information relative to handling and cleanup of spilled product		
8	If possible, complete the process of "soaking up" with appropriate absorbent materials		
9	Sweep or shovel contaminated products and soil into leak proof containers for proper disposal at approved location		
10	Spread activated charcoal over spill area to inactivate any residual herbicide		
11			